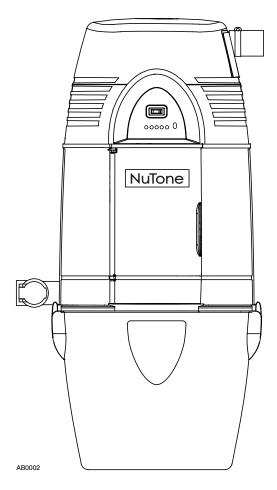
# **CENTRAL VACUUM POWER UNIT**

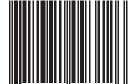
**⚠ FOR HOUSEHOLD USE ONLY ⚠** 



For Power Unit
NuTone models VX475CC, VX550CC, VX1040CC

#### **HOMEOWNER'S OPERATING INSTRUCTIONS**

Broan-NuTone Canada Inc.; Mississauga, Ontario www.nutone.ca 877-896-1119



REGISTER YOUR PRODUCT ONLINE AT: www.nutone.ca

page 2

# IMPORTANT SAFETY INSTRUCTIONS

# SAVE THESE INSTRUCTIONS READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE

When using an electrical appliance, basic precautions should always be followed, including the following:

#### **<u>MARNING</u>**

To reduce the risk of fire, electric shock, or injury:

- · Do not use on wet surfaces or outdoors.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Use only as described in this manual. Use only manufacturer's recommended attachments.

#### CAUTION

For all models, DO NOT REMOVE either of the TOP red cap plugs that are glued to the unit. Removing these glued plugs will damage the unit. Only remove and use the outlets covered by the green BOTTOM plugs.

- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair and anything that may reduce air flow.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without filter in place.
- Do not use to blow leaves or debris.
- · Do not vacuum liquids or fine powders (such as drywall dust).
- · Do not put any object on the unit.
- Ensure air flows freely to both side intake vents and exhausts unobstructed from top outlet.
- Do not install the unit horizontally.
- · Do not use the pail as a wash bucket.
- Do not use the pail as a stool.
- · Turn off all controls before unplugging.
- · Use extra care when cleaning on stairs.
- · Avoid picking up sharp objects.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Do not use with damaged cord or plug. If appliance is not working as it should, if it has been dropped, damaged, left outdoors, or dropped into water, return it to a Service Center.

- Do not unplug the unit by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- · Keep your work area well lighted.
- Connect to a properly grounded outlet only. See grounding instructions shown on page 9.
- Store your cleaner indoors in a clean, dry area.
- When performing installation, servicing or cleaning the unit, it is recommended to wear safety glasses and gloves.
- Any servicing other than that recommended in this manual should be performed by an authorized service facility.
- We recommend that your unit be inspected by a specialized technician once a year.

#### **OPERATION**

The power unit is located away from the everyday living areas of your home – usually in the garage, basement, or utility room. Through a network of strong, lightweight tubing, the power unit connects to inlets strategically placed throughout your home. To clean, attach cleaning tools to the system's hose and insert the hose into an inlet. The system is turned on by a power switch on the hose. As you vacuum, dirt and dust is transported to the power unit where it remains in a debris pail until emptied.

#### **⚠ WARNING**

To avoid electric shock, never use hose and tools on a wet surface. To avoid fire hazard, do not use vacuum to pick up matches, fireplace ashes, or smoking material.

 This device has been evaluated by the appropriate listing agencies and is intended for household use only.

The system status indicator light(s) on the front of the power unit indicate that the power unit is ready for use. Under normal operation, the light(s) will be green. (A red light on NuTone models VX550CC, VX1040CC indicates a need to empty pail. See page 4 for instructions.)

When you are ready to clean, attach the wand and cleaning tool onto the end of the hose. Open the inlet cover and insert the end of the hose into the inlet.

For non-switched hoses, inserting the hose automatically turns on the power unit; removing the hose shuts off the power unit. Some hoses have switches which can be used to activate power unit.

NOTE: The inlet located on the power unit does not automatically work when the hose is inserted. To turn on the power unit inlet, use the rocker switch located on the side of the power unit.

Use the cleaning tools as you would for any other vacuum cleaner. Avoid picking up pine needles, coffee sticks, and other similar objects. These kinds of objects may become lodged in the hose or tubing.

## FOR MODELS: DLXKIT800, STDKIT400, STDKIT800, WHKIT700

#### **INSTALLING HOSE HANGER**

If not already done, install the hose hanger by following these 3 steps.

 Place one loop of the hanger over the other (as shown beside).



Using a screwdriver, secure the hanger to the wall with the provided screw. Insert a plastic anchor if necessary.



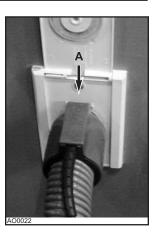
Wind hose around it's hanger when not in use.



#### **CONNECTING HOSE**

#### **LOW VOLTAGE HOSE**

To ensure proper operation of hose, insert hose into wall inlet (as shown beside). Align tab up with depression in wall inlet (A).



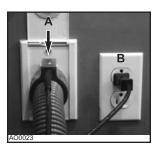
#### **CONNECTING HOSE (CONT'D)**

#### **DUAL VOLTAGE HOSE**

In addition to connecting into wall inlet (A), dual voltage hose must also be connected to a standard electrical outlet (B).

If your new hose connection is not compatible with the telescopic handle of your unit, please call 1-888-882-7626.

IMPORTANT: Do not return the hose to the store.



#### **OPERATING HANDLE SWITCH**

#### **LOW VOLTAGE HOSE**

The switch will turn vacuum power unit on/off.



#### **DUAL VOLTAGE HOSE**

Switch on the right position: central vacuum mode with power brush.



Switch on the left position: central vacuum mode without power brush.



Switch in the center: vacuum power unit is turned off.



#### FOR DLXKIT800 MODEL

# HOW TO ASSEMBLE POWER BRUSH/WAND/HANDLE

- Read important safety instructions before installing power brush.
- 2. Ensure hose is disconnected from power supply before installing power brush.
- 3. Push wand into power brush neck so that the lock button snaps in place.
- Connect hose handle into wand quick connector and ensure that the prongs are aligned with the receptacle holes. Push until lock button snaps in place.

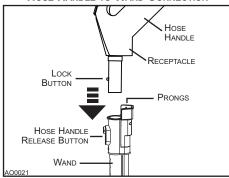
#### CAUTION

Always check underside of product for any obstructions prior to use.

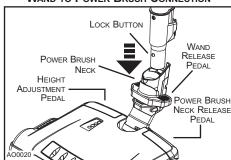
#### **⚠** WARNING

Never leave electric power brush unattended while it is plugged in.



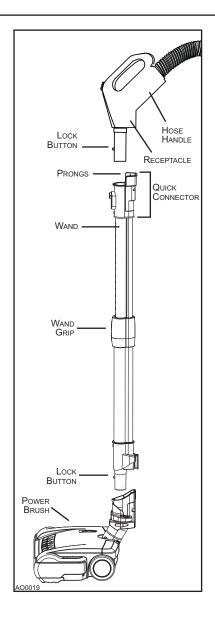


WAND TO POWER BRUSH CONNECTION

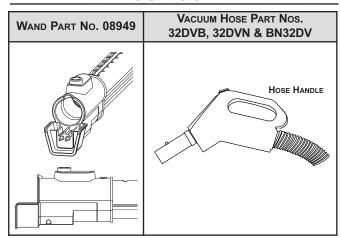


NOTE: If your dual voltage hose is not compatible with your new BN200 power brush, please contact Broan-NuTone Customer service at 1-888-882-7626 to receive a free electrical cord (Part no. CRD400-01) that will enable you to connect your new power brush to your hose.

IMPORTANT: Do not return the brush to your retail store.



#### WAND AND HOSE COMPATIBILITY



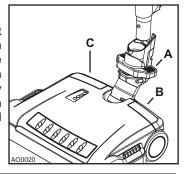
#### **HOW TO USE POWER BRUSH/WAND**

#### **CAUTION**

Always pick up hard or sharp objects by hand before using your power brush. Items such as pins, hairpins, tacks, crayons, etc., may damage the brush roll or may break the belt.

#### WAND RELEASE

The power brush is not recommended for use on bare floors. Wand release pedal (A) on power brush allows you to quickly disconnect wand and switch to combination floor/rug tool for use on bare floors.



#### **CAUTION**

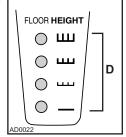
Always unlock brush neck before use.

#### POWER BRUSH NECK RELEASE

Push down power brush neck release pedal (B) to unlock brush neck. Return the neck to the upright position for storage.

#### POWER BRUSH HEIGHT ADJUSTMENT

The icons (D) refer to the carpet pile height. Select height by depressing height adjustment pedal (C) to desired position: \_\_\_ (Extra-Low), \_\_\_\_ (Low), \_\_\_\_ (Medium) or \_\_\_\_ (High).



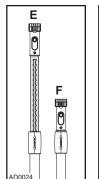
#### **H**EIGHT ADJUSTMENT LED INDICATORS

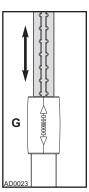
The LEDs show the carpet pile covered by the selected height, e.g.: when

LLLI (High) is selected, all LEDs will be lit, since this height covers all pile heights. So if \_\_\_ (Extra-Low) is selected, only the lowest LED will be lit.

#### WAND LENGTH ADJUSTMENT

Extend (E) or shorten (F) the wand to comfortable work position by holding the wand grip (G) in one hand and sliding the upper section (the one with the prongs) with the other hand.





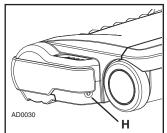
#### **EDGE CLEANER**

Brush extends full width for effective edge cleaning along both sides of nozzle. To operate, simply run cleaner along edge board. Rubber bumper protects furniture and baseboards.

#### **ELECTRONIC CIRCUIT BREAKER**

The power brush is equipped with an electronic circuit breaker that protects the motor and the belt if a too large object is picked up accidentally.

If the power brush stops while vacuuming, turn the power unit off using handle. Release the power brush from the wand



and turn it over to see if there is an obstruction. When brush roll jam has been cleared, press the reset button (**H**) and connect the power brush back to the wand. Finally, turn the power unit/power brush back on. If it fails to restart or continues to trip without any apparent reason, the power brush must be serviced by an authorized service center.

#### **CLEANING & STORAGE**

#### **⚠** WARNING

Disconnect electrical supply before servicing or cleaning the unit. Failure to do so can result in electrical shock or personal injury from cleaner suddenly starting.

#### **CLEANING BRUSH ROLL**

In order to keep high cleaning efficiency and to prevent damage to your vacuum cleaner, the brush roll must be cleaned every time the belt is changed.

The brush roll must also be cleaned according to the following schedule:

VACUUM CLEANER USE

Heavy (used daily)
Moderate (2-3 times per week)
Light (1 time per week)

**CLEAN BRUSH ROLL** 

Every week
Every month
Every 2 months

Check and remove hair, string and lint build-up frequently in the brush roll and end cap areas. Remove any dirt or debris in the belt path and in the brush roll areas.

#### **CLEANING HOUSING**

To keep the power brush housing clean, it can be wiped with a damp cloth and a mild soap solution, then thoroughly dried. Never use any type of chemical as they can damage the housing.

#### **STORAGE**

- Ensure that hose and power cord are disconnected from wall inlet before unplugging power brush.
- 2. Disconnect hose handle from wand.
- 3. Always keep hose neatly coiled when not in use.
- When not in use, the power brush should be stored in a clean, dry place.

page 6

#### MAINTAINING THE POWER BRUSH

#### **⚠** WARNING

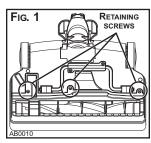
Disconnect electrical supply before servicing or cleaning the unit. Failure to do so can result in electrical shock or personal injury from cleaner suddenly starting.

#### **HOW TO CHANGE BELT**

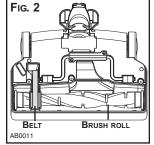
#### **MARNING**

Motor shaft can become hot during normal use. To prevent burns, avoid touching the motor shaft when replacing the drive belt.

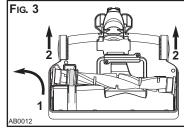
1. Turn power brush over and using a Phillips no. 2 screwdriver, remove the 3 brush roll cover retaining screws (**Fig. 1**) and set aside.



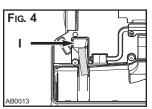
2. Remove brush roll cover. (Fig. 2)



 To free brush roll from base, start by sliding the belt side end and pull brush roll sideways (1). Once disengaged from housing, lift brush roll (2) out of its compartment (Fig. 3).



4. Disengage brush roll from worn belt and extract the belt from motor shaft by a twisting motion in the enlarge area (I) specifically made for that purpose (Fig. 4).



5. Install new belt by reversing steps 4 to 1.

**NOTE:** To ease belt replacement, start by inserting one end around the motor shaft in the enlarged area (I). Insert brush roll through belt until belt is seated in its place. Push down brush roll back in place.

#### **HOW TO CHANGE BRUSH ROLL**

Replace brush roll when brush roll brissles are worn to the base support bars level.

- Turn power brush over and using a Phillips no. 2 screwdriver, remove the 3 brush roll cover retaining screws (Fig. 1) and set aside.
- 2. Remove brush roll cover. (Fig. 2)
- To free brush roll from base, start by sliding the belt side end and pull brush roll sideways (1). Once disengaged from housing, lift brush roll (2) out of its compartment (Fig. 3).
- 4. Disengage brush roll from belt. Discard worn brush roll.
- 5. Insert new brush roll through belt until belt is seated in its place. Push down brush roll back in place.
- 6. Finalise the installation by reversing steps 2 to 1.

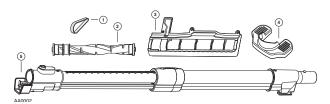
#### SERVICE INFORMATION

To avoid unnecessary service calls, check the belt and brush roll often. Replace the belt if it is stretched or cracked. Clean the brush roll bristles when they are wrapped with thread and hairs. Build-up could cause the brush to rotate unevenly.

The model number and serial number are indicated on the rating label located underneath the power brush. Always refer to these numbers when inquiring about service.

**NOTE:** The motor is permanently lubricated and sealed. Do not oil the motor at any time.

#### POWER BRUSH SERVICE PARTS



KEY No.	Part No.	DESCRIPTION	
1	09234	Belt	
2	09233	Brush roll	
3	09236	Brush roll cover with screws	
4	09235	Wand release pedal	
5	18651	Wand	

Order Service Parts by "Part No.", not by "Key No."

#### FOR ALL MODELS

#### VACUUM POWER CONTROL

The wand ends of the deluxe hoses are equipped with a control ring to regulate suction. The control ring covers a "bleeder" hole. Open the hole to reduce the suction for cleaning draperies, small rugs, and other light fabrics. Some very thick, plush carpets with high density yarns also require reduced suction to make the nozzle easier to push. Be sure to close the control ring completely over the hole to produce the maximum power required for most other cleaning tasks.

#### WHEN TO EMPTY THE DEBRIS PAIL

NuTone model VX475CC has a single indicator light that remains green. The level of pail fill for this model can be determined by either viewing through the window on the pail or releasing the carry handles and checking the level of debris in the pail.

NuTone models VX550CC & VX1040CC have the LED indicator that shows the status of the level of debris in the pail. The first three lights remain green as pail fills. The fourth light is amber and will come on to alert you that the pail is nearly full. When the fifth light turns red it is time to empty the pail (see CONTROL PANEL DIAGRAM A).

# CONTROL PANEL DIAGRAM A NuTone VX475CC Manually check pail to determine fill level. See NuTone VX550CC & VX1040CC Timed pail full indicators

#### **EMPTYING THE DEBRIS PAIL**

Your power unit has a permanent filter that is self cleaning under normal conditions. The filter protects the motor and stops small dirt particles from escaping to the outside of the power unit. The filter cleans itself by moving up when the power unit starts, and dropping down when the unit is turned off. The filter can be removed by means of a pull-tab for cleaning if desired. Be sure to reinstall properly. Correct placement is critical to insure proper protection for the motor.

- Release both carry handles on side of the unit by pulling out and then pushing up. (FIGURE 14). Holding the pail by the handles, lower it from unit (FIGURE 15).
- 2. Carry pail to trash receptacle and empty.
- 3. Reattach pail using handles.
- Push Reset button on control panel. Light on control panel will change to green on NuTone models VX550CC & VX1040CC.





Utility valve (Circled in FIGURE 15), next to power unit, can be used to service area around where power unit is installed.

#### **CLEANING THE INTERNAL FILTER**

When emptying the debris pail, it is a good idea to also clear any dust and dirt that may have accumulated on the internal filter media. To do this, simply open the direct door, reach in and tap the top of the internal filter (FIGURE 16). This will release any loose debris into the pail. You may empty the pail again at this point but it is not necessary as any amounts of dirt and dust will be minimal. Close the door.

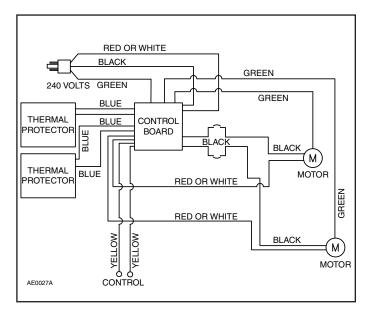


## **INTERNAL WIRING DIAGRAMS**

#### • VX475CC • VX550CC

#### WHITE **BLACK** GREEN GREEN 120 VOLTS BLUE BLUE THERMAL CONTROL PROTECTOR BLACK BOARD M MOTOR WHITE YELLOW ბ ბ CONTROL AE0005A

#### • VX1040CC



#### **GROUNDING INSTRUCTIONS**

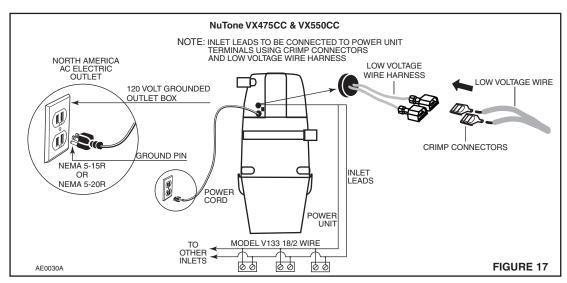
#### **WIRING**

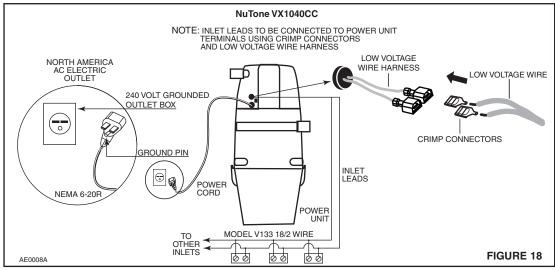
This section refers to Figure 17 and 18.

Grounding Instructions – This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**Danger** – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a standard 120 VAC, dedicated 15-amp branch circuit with a NEMA 5-15R receptacle or a dedicated 20-amp branch circuit with a NEMA 5-20R for NuTone models VX475CC & VX550CC. For NuTone model VX1040CC, a nominal 240VAC, dedicated 20-amp branch circuit with NEMA 6-20R receptacle is required. Make sure that the appliance is connected to an outlet and has a grounding attachment plug that looks like the plug shown in either Figure 17 or 18 depending on the model. No adapter should be used with this appliance.





# TROUBLESHOOTING GUIDE

Read before calling Service Center.

PROBLEMS	Possible causes	Possible Remedy				
1.Loss or decrease of vacuum occurs.	Debris pail is completely full.     Obstruction in the hose. A blockage in the hose can be determined by inserting the hose into any wall inlet and, while power unit is running, check each additional inlet for normal suction by holding the palm of your hand over the open inlet. If normal suction is felt at all other inlets, insert the hose into a second inlet. If the blockage still exists it is located in the hose. However, if the blockage does not occur when the hose is changed, the blockage is probably located in the tubing system leading to the original inlet.	power unit. Turn unit on. This will reverse normal air flow through the hose and dislodge any clogs.				
	Obstruction in the tubing system inside the walls.	place the palm of your hand over the opposite end of the hose. When you can feel the suction increase, hold your hand over the hose end for a few seconds and then quickly remove your hand. This procedure repeated several times should clear the obstruction. If the blockage is not cleared, contact your nearest Service Center.				
	<ul><li>Wall inlet cover not properly sealed.</li><li>Exhaust tubing or vent clogged.</li></ul>	<ul> <li>Check all wall inlet covers to be sure they are closed and sealed tightly.</li> <li>Inspect and remove any blockages.</li> </ul>				
2.Power unit does not start, or shuts off during normal operation with no LED showing red or illuminated.	<ul> <li>Defective inlet. Check other wall inlets.</li> <li>Thermoprotector has been activated OR there is a tripped circuit breaker on the unit.</li> </ul>	Replace defective wall inlet.     Turn unit off for 20 minutes then plug unit back in. If unit does not start, look for the tripped circuit breaker behind the unit, a white button has popped up, push it back to reset it. If circuit breaker trips again, unplug your unit and contact your local Service Center.				
	<ul> <li>Blown fuse or tripped circuit breaker on house electrical panel.</li> </ul>	Replace fuse or reset circuit breaker on house electrical panel.				
	<ul> <li>Defective hose.</li> <li>Microprocessor lockup.</li> <li>NOTE: This applies only to NuTone VX550CC &amp; VX1040CC.</li> </ul>	Replace hose as required.     1) Push Reset button while unit is engaged OR				
	Low line voltage.	Contact your local Service Center.				
3. Power unit fails to stop when the hose is removed.	<ul> <li>An electrical short has occurred somewhere in the system.</li> </ul>	A complete check of all wall inlets and power unit low voltage control lead connections. Contact your authorized Service Center.				
4. Power unit shuts off during normal operation, lights on unit, wall valve and hose are all red.	Debris pail full sensing has been activated.	Empty debris pail as described in page 7.				
5.On NuTone VX550CC & VX1040CC units only, all lights on control panel flash when unit is first plugged in.	Low line voltage.	Contact your local Service Center.				

## **SERVICE PARTS LIST**

### (NUTONE MODELS VX475CC, VX550CC & VX1040CC)



KEY No.	PART No.	Description	VX475CC	VX550CC	VX1040CC
1	10941189	Pail assembly VS	X		
		Pail assembly TS		Х	Х
2		Door assembly	X	Х	Х
3	10941199	Latch kit (with screws)		Х	Х
4	10941232	VS PCB's assembly (including mother, daughter and screws)*	X		
	10941233	TS1 PCB's assembly (including mother, daughter and screws)*		Х	
	10941195	TS2 Motherboard/Daughterboard S/A incl. screws*			Х
	10941235	VS motor with motor harness, fuse with fuse harness, circuit breaker*	Х		
5	10941236	TS1 motor with motor harness, fuse with fuse harness, circuit breaker*		Х	
	10941231	TS2 motor with motor harness, fuse harness, circuit breaker*			Х
	30100528	Pail gasket TS		Х	Х
	30100527	Pail gasket VS	Х		
	30010272	Cyclonic filter VS	X		
	30010270	Cyclonic filter TS		Х	Х
8		Motor Chamber VS with foam and logo*	Х		
L		Motor Chamber TS with foam and logo*		Х	Х
9	10941212	Top cap VS with logo	Х		
"	10941214	Top cap TS with logo		Х	Х

NOTE: Order service parts by "Part No." - not by "Key No."

<sup>\*</sup>This part MUST be removed and installed by a qualified technician.

#### WARRANTY

#### NUTONE MODELS VX475CC, VX550CC, VX1040CC

#### BROAN-NUTONE CANADA INC.

CENTRAL VACUUM POWER UNIT LIMITED LIFETIME WARRANTY

Broan-NuTone Canada warrants to the original consumer purchaser that its central vacuum power unit will be free from defects in materials and workmanship for as long as you own your home in which it was originally installed with the exception of the motor and electronic components which will be warranted for five (5) years. The first year of this warranty covers the parts and labor in an authorized service center. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

**During these time periods**, Broan-NuTone Canada will, at its option, repair or replace the power unit or part without charge, which is found to be defective under normal use and service. THIS WARRANTY DOES NOT APPLY TO THE INSTALLATION OR THE PARTS USED IN THE INSTALLED TUBING SYSTEM. All central vacuum hoses, electric or air-driven brushes, filters, attachments and accessories are warranted for one (1) year from the original purchase date with the exception to consumables such as light bulbs and belts.

This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Broan-NuTone Canada or an authorized representative), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the period as specified for the express warranty. BROAN-NUTONE CANADA'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN-NUTONE CANADA'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN-NUTONE CANADA SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Please do not return your unit to place of purchase. Please visit www.nutone.ca for your closest service center. You may also call 1-888-882-7626 for the name of an authorized representative in your area. This warranty supersedes all prior warranties.

Warranty service is to be completed by an authorized Service Center designated by Broan-NuTone Canada. Where applicable, in home service will be made available only in areas where a contracted service provider offers service. If in home service is not available, the product will be repaired or replaced, at Broan-NuTone Canada's discretion, by the nearest authorized service provider. The unit removal and reinstallation works are under the customer responsibility, and Broan-NuTone Canada cannot be charged for them.

To qualify for warranty service, you must notify Broan-NuTone Canada at the address or telephone number stated below. We will then forward you the authorized service depot in your area. You will be required to present evidence of the original purchase date.

Date of Installation

Builder or Installer

Model Number and Product Description

#### IF YOU NEED ASSISTANCE OR SERVICE

For the location of your nearest Broan-NuTone Canada Inc. dealer, dial toll free: **1-888-882-7626**Please be prepared to provide: Product model number • Date and proof of purchase • The nature of the difficulty Broan-NuTone Canada Inc. 1140 Tristar Drive, Mississauga, Ontario L5T 1H9

Product specifications subject to change without notice.

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